General Data

Type Reference:	ASI_BZ, ASI_BZL5
Description:	AS-Interface-Slave
Approvals:	ASI, cCSAus, GOST-R, UkrSepro

Communication

- AS-Interface Specification:	V2.11
- Slave profile:	S-B.A.E
- Connection:	via 2-pole IDC connector (3.96mm), type ref. "ASI_SB2AWG18"
- Connection cable:	double-core flexible wire, AWG18, e.g. "ASI_SL2AWG18"
- Max. network length:	100m (without repeater)
- Max. cycle time:	< 10ms (62 A/B slaves)

Ambient Conditions

- Operating temperature:	-25°C … +70°C
- Storage temperature:	-40°C … +80°C
- Humidity:	up to 95%, non-condensing

Mechanical Data

- Operating travel:	<= 3mm
- Operating cycles:	>= 1 million

Electrical Data

- Power supply:	26.5…31.6 V, through the AS-Interface line
- Total power consumption:	<= 30 mA
- Signalling unit - output *1):	supply through AS-Interface line, continuously short-circuit proof, overload protection
Max. load current of LED:	20 mA
Luminous intensity:	via D0/D1 individually controllable/dimmable in 4 steps
Rated voltage:	24 V DC (+10%)
Socket:	T5,5k
LED, Schlegel ref.:	L5,5k24U…

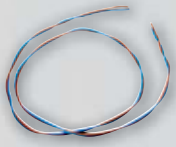**Norms and Standards**: CE, IEC 62026-2, cCSAus
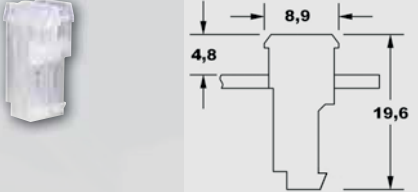
The Schlegel ASi slaves comply with the specification
AS-Interface POWER24 and can also be operated at 24 V.

*) only ASI_BZL5

Contact Blocks

2-pole connector (3.96 mm spacing)

Illustration	Description	Type

AS-Interface Slave bus-compatible (2 I/2O)

ASI_BZ

2-pole connector (3.96 mm spacing)
- unlighted
- small mounting depth due to built-in IDC connector
- with 2 integrated inputs D2/D3
- profile: S-B.A.E
- applicable standard: V2.11
- reversely compatible to type ASI_BZII5

suitable actuators

AS-Interface Slave with T5,5K socket bus-compatible (2 I/2O)

ASI_BZL5

2-pole connector (3.96 mm spacing)
- illuminated, LED socket T5,5K
- small mounting depth due to built-in IDC connector
- with 2 integrated inputs D2/D3
- with 1 integrated LED output, individually controllable/dimmable (4 steps) via D0/D1
- profile: S-B.A.E
- applicable standard: V2.11
- reversely compatible to type ASI_BZLII5

lamp socket   T5,5K

suitable actuators

Ultra-bright LED, T5.5K socket - 24V

with integrated series resistor and single-wave rectifier
for 24V AC/DC (7/14 mA)
When connecting to DC, the correct polarity must be observed:
+ ... X1/- ... X2
storage temperature:
-25°C … +80°C
ambient temperature:
-20°C … +60°C
voltage tolerance:
+10 %

colour		Type
	blue	L5,5K24UB
	green	L5,5K24UG
	red	L5,5K24UR
	white	L5,5K24UW
	yellow	L5,5K24UY

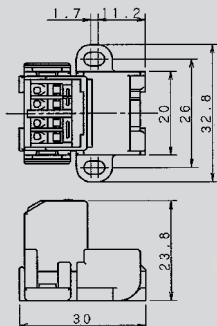| Illustration	Description	Type
	IDC Connector 2 poles, for AWG18, to connect the AS-Interface slaves by insulation piercing (IDC technology); with lock mechanism and strain relief Technical data: · connector spacing 3.96 mm · wire size: AWG18 (0.8...1.0 mm²) · outside dia.: 1.0...2.28 mm Recommendation: optimal strain relief when used with „ASI_K2"	ASI_SB2AWG18
	Cover with integrated strain relief for 2-pole IDC connector	ASI_K2
	Hand Tool serves to press the single conductors into the IDC connector, connector spacing 3.96 mm	ASI_MRT
	AS-Interface Addressing Cable serves to address the slaves ASI_BZ, ASI_BZL5 with a commercial AS-Interface hand addressing device. Technical data: · PVC cable 500 mm, 2 x 0.75 mm² · M12 straight-line plug	ASI_PK500M12
	Flexible Equipment Wire suitable for insulation piercing (IDC technology), serves to connect the AS-Interface slaves, twisted 2-core cable, brown/blue; 50 m per unit Technical data: . AWG18 . 19 wires . conductor resistance 21 Ohm/km . style no. 1007 / TR4 . operating temperature max. 80/90 °C (UL/CSA) . storage temperature down to -55 °C . acid/alkali-proof and oil-resistant . flame-resistant . keeps its elasticity under heat and cold	ASI_SL2AWG18

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Contact Blocks
2-pole connector (3.96 mm spacing)

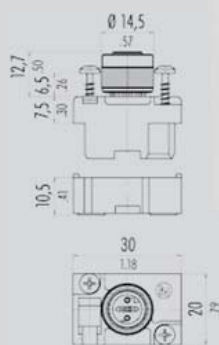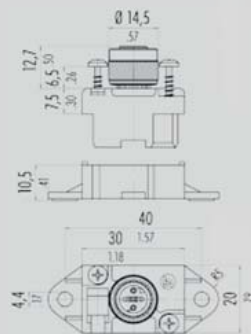| Illustration	Description	Type
	Flat Cable Branch with spring clamp connection serves to connect the AS-Interface slaves to the yellow profile line; Technical data: · AWG20-AWG18 · 31,6V / <= 3A · IP20 · ambient temperature: -25 up to 55° C · outside dia. of wire: 1.0...2.28 mm	LA9Z-SNTB
	Flat Cable Branch with M12 socket without mounting straps, allows connection of a cable with M12 connector to the yellow profile line; Technical data: · 2 A max. · IP20	ASI_AZM12
	Flat Cable Branch with M12 socket and mounting straps, allows the connection of a cable with M12 connector to the yellow profile line; Technical data: · 2 A max. · IP20	ASI_AZM12L
	M12 Straight-line Plug with plastic nut, self-assembly via screw connections, serves to connect the AS-Interface flexible equipment wire to a M12 connector Technical data: · 4 A max. · 4 poles · PG7	ASI_M12

Illustration	Description	Type

M12 Right-angle Plug
with plastic nut, self-assembly via screw connections, serves to connect the AS-Interface flexible equipment wire to a M12 connector.
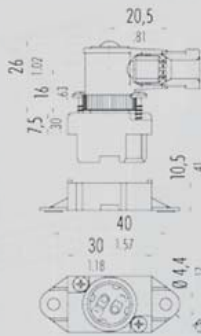
Technical data:
· 4 A max.
· 4 poles
· PG7

ASI_M12W

Flat Cable Branch
self-assembly via screw connections, with mounting straps, serves to connect the AS-Interface flexible equipment wire to the yellow profile line.
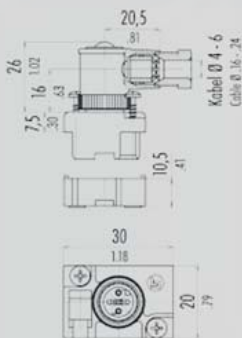
Technical data:
· 2 poles
· 4 A max.

ASI_AZL

Flat Cable Branch
self-assembly via screw connections, without mounting straps, serves to connect the AS-Interface flexible equipment wire to the yellow profile line.

Technical data:
· 2 poles
· 4 A max.

ASI_AZ

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General Data
Type Reference: ASI_SAW16A, ASI_SAW16E, ASI_SAW22A, ASI_SAW22E,
Description: AS-Interface Slave (Safety at Work)
Approvals: ASI, cCSAus, GOST-R, TÜV_SÜD, CE, UkrSepro

Communication
- AS-Interface specification: V 2.1

- Slave profile:	ASI_SAWxxA	S-7.B.E
	ASI_SAWxxE	S-0.B.E

- Standby delay time: < 1s
- Input delay: < 5ms
- Connection: via 2-pole IDC connector(3.96mm) with lock mechanism and strain relief
                                        type ref.: "ASI_SL2AWG18"
- Addressing: via integrated connector or separate addressing connector *)

Ambient Conditions
- Operating temperature: -25 °C ...+70 °C
- Humididy: up to 95%, non-condensing
- Degree of protection /slave: IP20
- Pollution degree: 2 (acc. to IEC 60947-1)

Electrical Data
- Operating voltage: 26.5...3.,6 V, through the AS-Interface line
- Total power consumption: ASI_SAWxxA: <= 60 mA
                                          ASI_SAWxxE: <= 50 mA
- Reverse polarity protection: available
- Contacts: two positive opening contacts acc. to IEC60947-5-5
- Safety integrity level: SIL 3

- Output (not safe):   for the control of a LED *)
 Rated voltage: 24 V DC (+10%)
 Max. power consumption: approx. 15mA
 Short circuit/overload: LED output
 Connection cable: type ref.: "VK_JST025BKL", "VK_JST034"

Norms and Standards
- Complete AS-Interface Specification, Version 2.11 Rev.1, V3.0 Rev. 0
- IEC 62026-2, IEC 60204-1,IEC 61508, EN 13850, IEC 60947-5-5
- TÜV Type Approval, UL/CSA Approval
- AS-Interface Certificate 62801

- The Schlegel ASi slaves comply with the specification
   AS-Interface POWER24 and can also be operated at 24 V.

*) refers only to types ASI_SAW16A, ASI_SAW22A (wiih additional addressing connector)

Illustration	Description	Type

AS-Interface Slave (Safety at Work) 16 mm
for safety-related control units of 16 mm mounting diameter, e.g. emergency-stop actuators
- with short-circuit proof, individually controllable, digital output
- permanent monitoring and safety shutdown if contact block and actuator are separated
- profile: S-7.B.E
- applicable standard: V 2.1
- safety integrity level: SIL 3

suitable actuators

ASI_SAW16A

AS-Interface Slave (Safety at Work) 16 mm
for safety-related control units of 16 mm mounting diameter, e.g. emergency-stop actuators
- profile: S-0.B.E,
- applicable standard: V 2.1
- safety integrity level: SIL 3

suitable actuators

ASI_SAW16E

AS-Interface Slave (Safety at Work) 22 mm
for safety-related control units of 22 mm mounting diameter, e.g. emergency-stop actuators
- with short-circuit proof, individually controllable, digital output
- permanent monitoring and safety shutdown if contact block and actuator are separated
- profile: S-7.B.E,
- applicable standard: V 2.1
- safety integrity level: SIL 3

suitable actuators

ASI_SAW22A

AS-Interface Slave (Safety at Work) 22 mm
for safety-related control units of 22 mm mounting diameter, e.g. emergency-stop actuators
- profile: S-0.B.E,
- applicable standard: V 2.1
- safety integrity level: SIL 3

suitable actuators

ASI_SAW22E

Connection Cable
serves to connect an illuminated emergency-stop pushbutton to a AS-Interface slave (Safety at Work),
2-core strand, red/black, 0.25 mm², with male connector crimped on both sides,
length: approx. 10 cm

VK_JST025BKL

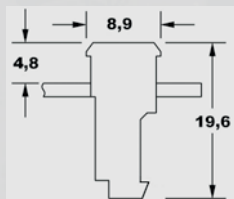| Illustration	Description	Type

Connection Cable — VK_JST034
with open end, to connect e.g. an external LED signal lamp to an AS-Interface slave (Safety at Work), 2-core strand, red/black, 0.34 mm², with male connector crimped on one side, length: approx. 10 cm

Please refer to the E-stop enclosures for AS-Interface systems starting on page 592

IDC Connector — ASI_SB2AWG18
2 poles, for AWG18, to connect the AS-Interface slaves by insulation piercing (IDC technology);
with lock mechanism and strain relief

8,9
4,8
19,6

Technical data:
· connector spacing 3.96 mm
· wire size: AWG18 (0.8...1.0 mm²)
· outside dia.: 1.0...2.28 mm

Recommendation: optimal strain relief when used with „ASI_K2"

Cover with integrated strain relief — ASI_K2
for 2-pole IDC connector

Hand Tool — ASI_MRT
serves to press the single conductors into the IDC connector, connector spacing 3.96 mm

AS-Interface Addressing Cable — ASI_PK500M12
serves to address the slaves ASI_BZ, ASI_BZL5 with a commercial AS-Interface hand addressing device.

Technical data:
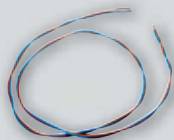· PVC cable 500 mm, 2 x 0.75 mm²
· M12 straight-line plug

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Contact Blocks
2-pole connector (3.96 mm spacing)
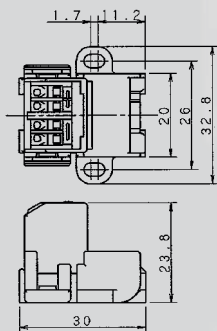
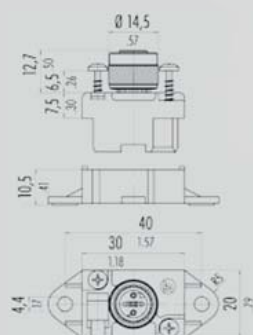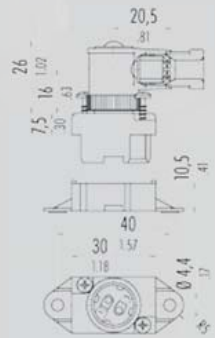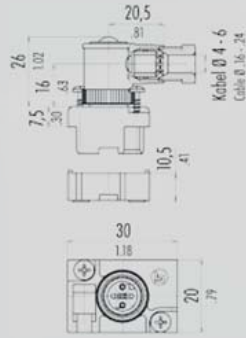| Illustration	Description	Type
	Flexible Equipment Wire suitable for insulation piercing (IDC technology), serves to connect the AS-Interface slaves, twisted 2-core cable, brown/blue; 50 m per unit Technical data: · AWG18 · 19 wires · conductor resistance 21 Ohm/km · tyle no. 1007 / TR4 · operating temperature max. 80/90 °C (UL/CSA) · storage temperature down to -55 °C · acid/alkali-proof and oil-resistant · flame-resistant · keeps its elasticity under heat and cold	ASI_SL2AWG18
	Flat Cable Branch with spring clamp connection serves to connect the AS-Interface slaves to the yellow profile line; Technical data: · AWG20-AWG18 · 31,6V / <= 3A · IP20 · ambient temperature: -25 up to 55° C · outside dia. of wire: 1.0...2.28 mm	LA9Z-SNTB
	Flat Cable Branch with M12 socket without mounting straps, allows connection of a cable with M12 connector to the yellow profile line; Technical data: · 2 A max. · IP20	ASI_AZM12
	Flat Cable Branch with M12 socket and mounting straps, allows the connection of a cable with M12 connector to the yellow profile line; Technical data: · 2 A max. · IP20	ASI_AZM12L

Illustration	Description	Type
	M12 Straight-line Plug with plastic nut, self-assembly via screw connections, serves to connect the AS-Interface flexible equipment wire to a M12 connector Technical data: · 4 A max. · 4 poles · PG7	ASI_M12
	M12 Right-angle Plug with plastic nut, self-assembly via screw connections, serves to connect the AS-Interface flexible equipment wire to a M12 connector. Technical data: · 4 A max. · 4 poles · PG7	ASI_M12W
	Flat Cable Branch self-assembly via screw connections, with mounting straps, serves to connect the AS-Interface flexible equipment wire to the yellow profile line. Technical data: · 2 poles · 4 A max.	ASI_AZL
	Flat Cable Branch self-assembly via screw connections, without mounting straps, serves to connect the AS-Interface flexible equipment wire to the yellow profile line. Technical data: · 2 poles · 4 A max.	ASI_AZ